



Storm Water

Custodian: The Corporation of the District of Saanich, Water Resources Division

Publish Date: January 1, 2003

Abstract: The storm water dataset represents a collection of features that receive surface runoff into the storm water collection system.

Purpose: The storm water dataset is captured to support the management, planning, and maintenance of storm drain assets.

Status: Complete

Update Frequency: Weekly

Credits: The Corporation of the District of Saanich, Engineering Department, Public Works Division, Storm and Wastewater Section, IT Dept GIS

Coordinate System: NAD 1983 CSRS UTM Zone 10N (WKID: 3157)

Geometry Type: Point & Line

The 10 Data Layers comprising Stormwater are:

1. Storm Abandoned Asset
2. Storm Abandoned Main
3. Storm Catch Basin
4. Storm Cleanout
5. Storm Connection
6. Storm Fitting
7. Storm Gravity Main
8. Storm Lateral
9. Storm Manhole
10. Storm Network Structure

1. Storm Abandoned Asset

Abstract: The abandoned storm asset is a device that formerly transported, stored or analyzed water through the storm water network. Abandoned storm assets remain in the ground and are comprised of an extensive classification of former junction points including Catch Basin (CB, Silt Trap, Oil Interceptor), Cleanout (Main, Lateral), Connection (Standard, Inspection, Cap), Fitting (Junction, Main Cap, Reducer), Manhole, Network Structure (Pump Station).

Geometry Type: Point

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|--|
| OBJECTID/FID | Internal feature number | 10 |
| ASSETTYPE | Type of abandoned asset | Manhole, Fitting (Main Cap) |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DMH007166 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |

2. Storm Abandoned Main

Abstract: The abandoned storm main is a pipe that no longer participates in the storm water network. Abandoned storm mains remain in the ground with the disconnected ends being capped. Types include Gravity Main (Collector, Culvert, Box Culvert, Lateral (Standard, Lead, Wye).

Geometry Type: Line

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|--|
| OBJECTID/FID | Internal feature number | 37 |
| MAINTYPE | Type of abandoned main | Gravity Main (Collector, Culvert, Box Culvert, Lateral (Standard, Lead, Wye) |
| CROSSECTIONTYPE | Cross section shape of pipe | Circular, Arch, Box |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DGM006642 |
| MATERIAL | Pipe material type | Non Reinforced Concrete |

| | | |
|-----------|------------------------------|--|
| DIAMETER | Pipe diameter in millimetres | 250 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Line |
| SHAPE.LEN | Length of pipe in metres | 6 |

3. Storm Catch Basin

Abstract: A catch basin is a chamber or well used to receive surface runoff into the collection system. Catch basins remove water runoff from roadways and allow debris and solids to settle out of the water prior to the water entering the storm mains. Catch basins may also be modeled as curb inlets or storm water inlets. Types include Catch Basin, Silt Trap and Oil Interceptor.

Geometry Type: Point

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|---|
| OBJECTID/FID | Internal feature number | 146 |
| SUBTYPE | Type of catch basin | 1 = Catch Basin 2 = Silt Trap 3 = Oil Interceptor |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DCB016073 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |

4. Storm Cleanout

Abstract: A storm cleanout provides an access to the storm collection system for the purpose of inserting cleaning tools, such as rods or snakes while cleaning a pipeline or cleaning a blockage. A cleanout is generally found at the upstream end of a storm gravity main. Cleanouts are sometimes found on laterals near property line. Types include Main and Lateral.

Geometry Type: Point

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------|-------------------------|----------|
| OBJECTID/FID | Internal feature number | 12 |

| | | |
|--------------------|---|--|
| SUBTYPE | Type of cleanout | 1 = Main 2 = Lateral |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DCT000817 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |

5. Storm Connection

Abstract: A storm connection represents the point location where Saanich's storm collection system meets the customer's storm water line. These representative points are most commonly located at the property line or right of way boundaries. Types include Standard, Inspection, and Capped.

Geometry Type: Point

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|---|
| OBJECTID/FID | Internal feature number | 12 |
| SUBTYPE | Type of connection | 1 = Standard 2 = Inspection 3 = Cap |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DCN002912 |
| DEPTHM | Recorded ground to connection depth in metres | 2.3 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |

6. Storm Fitting

Abstract: A storm fitting represents the device used to connect or cap storm main lines. They can be found at the end of a pipe or at a junction between two pipes where a transition must occur. This

transition could be a change in pipe material, pipe diameter, or pipe installation year. Types include Junction, Main Cap, and Reducer.

Geometry Type: Point

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|--|
| OBJECTID/FID | Internal feature number | 12 |
| SUBTYPE | Type of fitting | 1 = Main Cap |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DFG003537 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |

7. Storm Gravity Main

Abstract: A storm gravity main is a type of pipe that is not pressurized and relies on gravity to move the storm water through the main. Types include Collector, Culvert, and Box Culvert.

Geometry Type: Line

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|---|
| OBJECTID/FID | Internal feature number | 12 |
| SUBTYPE | Type of gravity main | 1 = Collector 2 = Culvert 3 = Box Culvert |
| CROSSSECTIONSHAPE | Cross section shape of pipe | Circular, Arch, Box |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DGM006980 |
| MATERIAL | Pipe material type | Poly Vinyl Chloride |
| DIAMETER | Pipe diameter in millimetres | 200 |

| | | |
|-----------------------|---|--|
| HORIZONTALMEASUREMENT | Horizontal measurement of pipe (typically box culvert) in millimetres | 1800 |
| VERTICALMEASUREMENT | Vertical measurement of pipe (typically box culvert) in millimetres | 1200 |
| RELINED | Pipe has been relined | Yes or No |
| RELINEMETHOD | Construction method used for pipe relining | Pipe Bursting, Cured in Place |
| RELINESTRUCTURAL | Relined pipe has had significant reconstruction | Yes or No |
| HOSTMATERIAL | Material type for host pipe | Non Reinforced Concrete |
| LINERTHICKNESS | Thickness of liner in millimetres | 16 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Line |
| SHAPE.LEN | Length of pipe in metres | 523 |

8. Storm Lateral

Abstract: A storm lateral is a small-diameter pipe that runs from the gravity main line to the customer premises. Types include Standard, Catch Basin Lead, and Wye. The pipe diameter is predominantly assumed to be 100 mm.

Geometry Type: Line

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|-------------------------------------|
| OBJECTID/FID | Internal feature number | 12 |
| SUBTYPE | Type of lateral | 1 = Standard 2 = Lead 3 = Wye |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DLL034268 |
| MATERIAL | Pipe material type | Poly Vinyl Chloride |

| | | |
|-----------|----------------------------------|--|
| DIAMETER | Pipe diameter in millimetres | 100 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Line |
| SHAPE.LEN | Length of pipe lateral in metres | 22.3 |

9. Storm Manhole

Abstract: A storm manhole is a hatch that allows access for operators or equipment to storm gravity mains in a storm water collection system. It may also be called an access hole or maintenance hole. Types include Standard Manhole, Wood Box, and Concrete Box.

Geometry Type: Point

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------------|---|--|
| OBJECTID/FID | Internal feature number | 12 |
| MANHOLETYPE | Type of manhole | Standard, Box |
| CONSTRUCTIONTYPE | Manhole construction type | Concrete, Wood |
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DMH008078 |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |

10. Storm Network Structure

Abstract: A storm network structure is used to convey water through the storm water collection system in non-gravity scenarios and operating structures. Type includes Pump Station.

Geometry Type: Point

Attribution Information:

| FIELD NAME | DESCRIPTION | EXAMPLES |
|--------------|---------------------------|------------------|
| OBJECTID/FID | Internal feature number | 12 |
| SUBTYPE | Type of network structure | 1 = Pump Station |

| | | |
|--------------------|---|--|
| ADMINISTRATIVEAREA | Organization or jurisdictional owner responsible for maintenance of feature | District of Saanich |
| FACILITYID | Unique Alphanumeric ID assigned by Saanich | DNS000001 |
| PUMPSTATIONNAME | Pump Station Name | Killarney |
| GLOBALID | Unique Global Identifier | {2AD1E3A4-C091-4CD3-9582-F6D6BCE6039A} |
| SHAPE | Feature geometry | Point |